

VII. OPPORTUNITIES FOR BAY AREA/SOUTH FREMONT INDUSTRIAL EXPANSION

The context for industrial growth in the Bay Area and the City of Fremont has changed significantly in the past two decades—particularly in light of the Great Recession and its lingering effects. With increased competition from other areas with lower production costs whether in the United States or abroad, there are many industrial uses that are no longer locating in the Bay Area. There are nevertheless a number of industrial activities that continue to remain, expand, and be attracted to the Bay Area. These include firms that serve the regional economy and require proximity to their customer base, firms with a history and base in the Bay Area, and firms requiring the skilled labor pool offered by Bay Area communities. As one of the few areas in the heart of the Bay Area that combines a history of successful industrial development with more room to accommodate new industrial uses at competitive cost, the City of Fremont has the potential to continue to grow and expand its current industrial base.

Based on findings and conclusions drawn from the market demand analysis and the preceding sections of this White Paper, this chapter considers South Fremont in the context of the Bay Area and the region's larger industrial trends and evaluates the opportunities for manufacturing in Fremont and particularly in the South Fremont/Warm Springs Study Area. The City's core assets, including existing industrial business clusters and particularly those that are most likely to contribute to future industrial job growth in the City, are identified and described for purposes of framing the panel discussion.

Regional Context

Interstate 80/880 Corridor

Fremont's local economy is simultaneously tied to the economic trends of Silicon Valley and the I-80/880 Corridor. The I-80/880 Corridor is one of the largest employment centers in the East Bay, accounting for approximately 528,000 jobs, or 15 percent of the Bay Area total. Running north-south along the western edge of the East Bay, the I-80/880 Corridor traverses the western edge of Contra Costa County and Alameda County.⁷⁶

About 27 percent of the employment along the I-80/880 Corridor, 142,000 jobs, falls under the manufacturing, wholesale, and transportation category, the ABAG-defined job category containing the most industrial jobs. This is similar to the proportion in Silicon Valley, but significantly higher than the average in the rest of the Bay Area of 20.6 percent. The level of industrial employment along the I-80/880 Corridor is tied to the history of the area and the associated advantages of proximity to the Port of Oakland and other regional transportation infrastructure. The Corridor also accounts for 20 percent of the total manufacturing, wholesale, and transportation jobs in the Bay Area.

⁷⁶ In this white paper, the I-80/880 Corridor is defined as including the cities of Berkeley, Emeryville, Oakland, San Leandro, Hayward, Union City, Newark, and Fremont.

Silicon Valley

Silicon Valley is located in the southern part of the San Francisco Bay Area with its core represented by Santa Clara and San Mateo Counties, the definition of Silicon Valley used in this analysis. However, the strong economic connections and expanding reach have, more recently, resulted in more expansive definitions, including portions of southern Alameda County, as well as the Santa Cruz County community of Scotts Valley.

The defining characteristics of Silicon Valley are its interrelated industries and economic activities that have created a region recognized worldwide as a leader in technological innovation and progressive corporate culture. Silicon Valley is home to the headquarters of numerous internationally prominent information technology companies such as Cisco, Apple, Hewlett Packard, Google, Facebook, and Intel and Fremont-based companies like Lam Research, and Logitech. In addition, the region is home to many more small and/or start-up firms that also contribute to the region's reputation. Silicon Valley supports 1.3 million jobs, 36 percent of the Bay Area total. Similar to the I-80/880 Corridor, Silicon Valley has a high concentration of manufacturing, wholesale, and transportation jobs, especially in Santa Clara County.

The history of economic growth in Silicon Valley is closely tied to Stanford University and other Bay Area educational institutions as well as the linkages between academic and federal research and industry. Silicon Valley has been at the forefront of a number of the most significant innovation waves since 1950, including the semiconductor industry, the personal computer industry, the internet industry, and the biotech industry. It is also at the forefront of the emerging green/clean tech industry and the ongoing convergence of the biotech, nanotech, and infotech fields.

Fremont

The City of Fremont is located in the southern portion of the I-80/880 Corridor adjacent to the smaller cities of Newark and Union City as well as the City of Milpitas in Santa Clara County, and across the Dumbarton Bridge from the City of Palo Alto. Historically, its economic growth and contractions were primarily related to the economic performance of I-80/880's industrial base. However, much of the new economic growth in the City since 1990 has been tied to the economic performance of Silicon Valley and has related to established and emerging technology sectors.

Approximately 94,000 jobs are located in Fremont,⁷⁷ accounting for 18 percent of total Corridor employment. Fremont's economy has historically been linked to traditional industrial and distribution uses, though technology-related industrial uses have become an increasing part of its employment base over the last twenty years. Over 40 percent of the City's jobs, about 39,000, are in manufacturing, wholesale, and transportation. Fremont accounts for about one in four of the manufacturing, wholesale, and transportation jobs along the corridor.

While much of Fremont's existing development occurred before 1990, the rapidly expanding Silicon Valley economy of the 1990s pushed its geographic boundaries outward. Between 1995 and 2000, Fremont added 33,000 jobs, equivalent to about 12 percent of the Santa Clara and

⁷⁷ ABAG Projections 2009 job estimates do not reflect the closure of the former NUMMI plant.

San Mateo County job growth over the same period. New industrial job growth in Fremont since 1990 has increasingly been driven by technology sectors, including the communications and computer manufacturing sector, the biotech sector, and, more recently, the clean tech sector.

The downturn of the early 2000s, followed by the Great Recession, had a significant impact on Fremont, in part because of the City's increasing focus on technology companies. The City has, however, continued to maintain a diverse industrial base over the last decade, providing a stable environment for ongoing operations, opportunities for expansion, and attractive opportunities for new firms, including a number of publicly and privately supported clean tech firms over the past two to three years.

Fremont's Key Assets

For Fremont, the competition for future industrial expansion is strong, with competing locations including Asia, other lower cost of business states, other regions in California, and other cities in the Bay Area. Like Fremont, many cities are seeking to balance the competing demands for land among residential, retail, office, and industrial uses, while expanding their economic base and improving their fiscal situation. Fremont will need to build off its existing strengths if it wishes to maintain and grow its diverse economic base. More specifically, the City will need to identify its place in the global competition for industrial jobs and protect its core assets. For firms considering locating in the San Francisco Bay Area, the City offers the following key assets.

Location

Fremont is located to the east of the San Francisco Peninsula, north and east of parts of Silicon Valley, and at the southern edge of the I-80/880 Corridor. The City is served by BART, providing access throughout the East Bay and to San Francisco and the Peninsula, and construction is set to begin next year on a second Fremont station in the South Fremont/Warm Springs Study Area. Fremont's central Bay Area location provides good accessibility for logistics and distribution businesses and provides easy access to the City for the labor force from the Silicon Valley, Peninsula, and bedroom communities in the Tri-Valley. Fremont is centrally located between the three largest airports in the Bay Area, enabling easy national and international access. These airports are San Francisco International to the west, Oakland International to the north, and San Jose International to the south. Fremont is also close to the Port of Oakland, and the South Fremont/Warm Springs Study Area is served by freight rail.

Fremont is also close to the Bay Area's national laboratories (e.g., Lawrence Livermore National Laboratory and Sandia National Laboratories) and universities, including Stanford, Berkeley, and San Jose State. The 20,000-student Ohlone College is located in Fremont and offers three biotech certificates.

Vacant Land

Although Fremont has developed the majority of its developable land like many surrounding cities, tracts of vacant land still exist, including parcels in the South Fremont/Warm Springs Study Area. With a total area of 92 square miles, Fremont has been a desirable destination for companies seeking larger plots of land and developers seeking to capitalize on these opportunities. The City has also earned a reputation as business-friendly and helpful in its assistance of development and promoting economic growth. As the City continues to evolve, it

will become increasingly important to protect compatible uses and direct future growth effectively.

Land Values and Lease Rates

Historically, Fremont's land values have been more in line with the other cities along the I-80/880 Corridor and below those of Silicon Valley and the Peninsula. As a result, Fremont has been a sought-after destination for residents and businesses seeking affordable land or building space.

Skilled Labor Force

Fremont's educated and diverse labor force helps to maintain the City's competitive edge. More than 43 percent of the population has at least a bachelor's degree, 65 percent above the State average. Furthermore, when NUMMI closed in April 2010, thousands of highly-skilled workers entered the job market. Fremont also has an entrepreneurial culture, with a significant number of small home-based businesses operating in the City.

Existing Industries

Fremont's skilled labor force has allowed the City to attract a broad range of industries. Major industries in Fremont include biotech, high tech, and a range of other firms that choose to locate in proximity to research, assembly, and production facilities. The City has been home to the facilities of some of the largest companies in the Bay Area, including Lam Research, Boston Scientific, 3ParData, and ASI Corp. It also includes a number of prominent clean tech firms, including Solyndra, Deeya Energy, and Tesla. The large base of Fremont's existing industries presents expansion opportunities and additional appeal to attract new tenants.

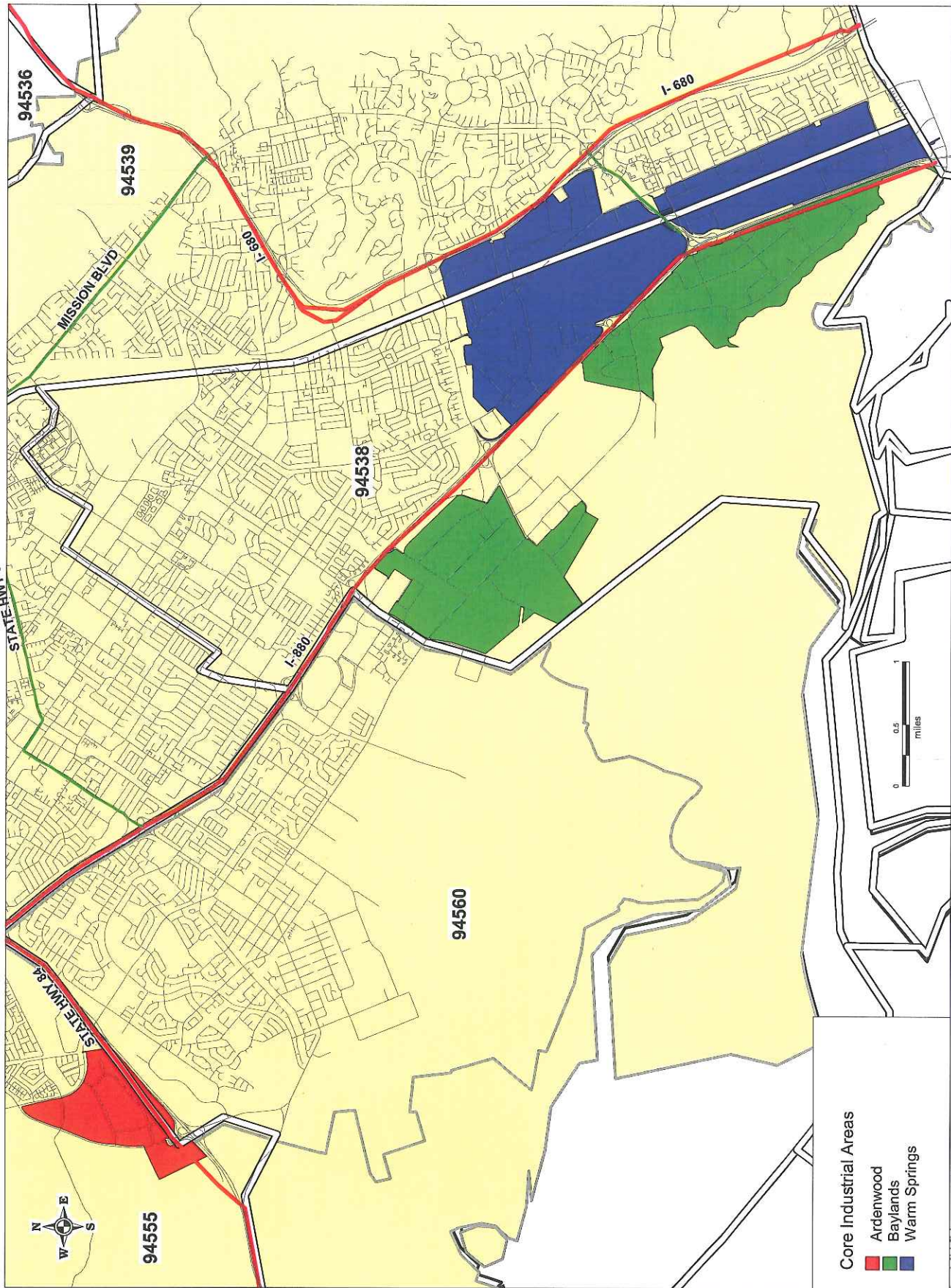
Fremont Industrial Areas

Ardenwood

Figure 18 shows the boundary of the Ardenwood core industrial area. Located at the Highway 84/I-880 junction, Ardenwood is characterized by 2- to 4-story business parks with office, R&D, and manufacturing buildings. Since the 1990s, it has accommodated a large number of new businesses and developments and attracted many biotech and information technology firms.

Ardenwood comprises approximately 350 acres, bounded by vacant land to the northwest, with existing and planned residential development along its eastern border. Highway 84 divides the District from the City of Newark, where the former Sun Microsystems campus and additional business parks comprise a significant amount of office/R&D space. Although more than 1.1 million square feet of commercial space has already been developed by Peery Arrillaga and Sobrato Development Corporation to accommodate the growth of the 1990s, there is still a substantial amount of vacant land within the District.

Figure 18:
Core Industrial Areas



The area's easy accessibility to the Peninsula, newer building inventory with 1997 as the median construction year, and availability of suitable space have historically appealed to many new businesses, the majority of which are in the biotech and computer and communications manufacturing clusters. Many tenants, driven by lower rents and flexibility of space, have relocated to Ardenwood from the Silicon Valley and the Peninsula where workspace rents have been significantly higher.

Interviews with business owners and brokers suggest that Ardenwood has strong economic ties to Silicon Valley and is regarded as a higher-end location relative to Fremont's other industrial areas. Modern workspace design and large R&D inventory are able to accommodate various users, including biotech and information technology companies.

Baylands

Bayland's character is of a more traditional industrial nature compared to Ardenwood, and has stronger economic ties to the I-80/880 Corridor as well as the Silicon Valley. In particular, the northern part of Baylands around Stevenson Boulevard includes concrete manufacturers and other similarly heavy industrial operations. Areas along I-880 to the south tend to feature higher-end, single-story R&D/manufacturing buildings and office parks, the majority of which are relatively new. Baylands also includes highway-oriented retail centers along the northwest portion of Stevenson Boulevard. The majority of the district is located in a Redevelopment Project Area.

Baylands includes some of the largest business parks in the Silicon Valley, such as Bayside Business Park and Bayside Technology Park. Pacific Commons, located on former industrial land is also in the greater Baylands area and features large-format big box retail with tenants such as Costco, Kohl's and Circuit City. Despite ongoing changes, there are large undeveloped tracts of land still available in the north and south Baylands industrial areas. Amenities in Baylands include wide tree-lined streets and sidewalks. These amenities have historically appealed to heavier industrial uses, such as manufacturing and warehousing, though the mix of tenants has expanded to include semiconductor, biotech, engineering, and logistics industries since the 1990s.

Baylands Business District is accessible by I-880 and includes significant employment in a number of driving industries, including computer and communications manufacturing, distribution and logistics, biotech, and software and communications technology. Prominent employers include Smart Modular Technologies, Lam Research Corporation, Boston Scientific Corporation, and Asyst Technologies. Employment in the driving industries is estimated at over 20,000 jobs.

Warm Springs

Warm Springs is located in southeastern Fremont, between Interstates 880 and 680. The north portion of the district (north of Mission Boulevard) is dominated by the former New United Motor Manufacturing, Inc. facility, now owned and operated by Tesla, and a mix of warehouse space along Warm Springs Boulevard. The area south of Mission consists of low-rise R&D and warehouse space, with pockets of vacant and underutilized land interspersed between a mix of

older industrial businesses and a few newer businesses. The Warm Springs area is slightly smaller than Baylands and significantly larger than Ardenwood.

Warm Springs has the highest employment in the driving industry sectors at about 35,000 jobs. Tenants include a number of technology companies engaged in software, hardware, telecommunications, semiconductors, biotech, and clean tech. Companies include Western Digital, Stats CHIP Pac Ltd Thermo, Seagate Technology, Wintec, and Solyndra. Warm Springs employs significant numbers in the computer/communications manufacturing, diversified industrial support, distribution and logistics, and software and communications clusters. It also includes the company Solyndra that currently represents the majority of jobs in Fremont's clean tech cluster.

South of Mission Boulevard, Warm Springs is bounded by older residential neighborhoods on the east, with some new residential developments being permitted and built on the former industrial land at the southern end. Warm Springs is planned to become home to a new BART station, located at Warm Springs Boulevard and Grimmer Boulevard. Construction of the BART station will likely increase the area's appeal and offer better transit accessibility.

Potential Future Opportunities for the South Fremont/Warm Springs Study Area

Clearly the Bay Area offers many opportunities for future economic growth across a range of key industries. And, starting as far back as the 1960s, Fremont has been very successful at capturing successive waves of Bay Area industrial expansion because of the City's strong location, available land supply, and positive business climate. So, while NUMMI's departure has created a major challenge for the City and for many businesses throughout California, Fremont seems poised to participate in the next round of industry expansion as well. Tesla, and its willingness to co-locate with a broader range of land uses could represent a significant new opportunity for Fremont to both attract new "cutting edge" industries and create an urban mixed use district oriented around the BART station.

However, as the many Panelist Questions for Consideration in the first chapter of this report imply, it will be very challenging for Fremont to actually capitalize on the potential opportunity. The Panel discussion surrounding these questions will help the consultant team formulate a realistic and empirically based set of land use alternatives for the Study Area, and will provide additional input to the public discussion on the Study Area's future. At the end of this process, the final South Fremont/Warm Springs Land Use Plan will be successful if it helps the City continue to attract businesses, on the leading edge of technological innovation, continues to support and expand the City's existing employment base, and creates additional opportunities for people to live in neighborhoods that are healthy and offer a range of housing and mobility choices.

Appendix A

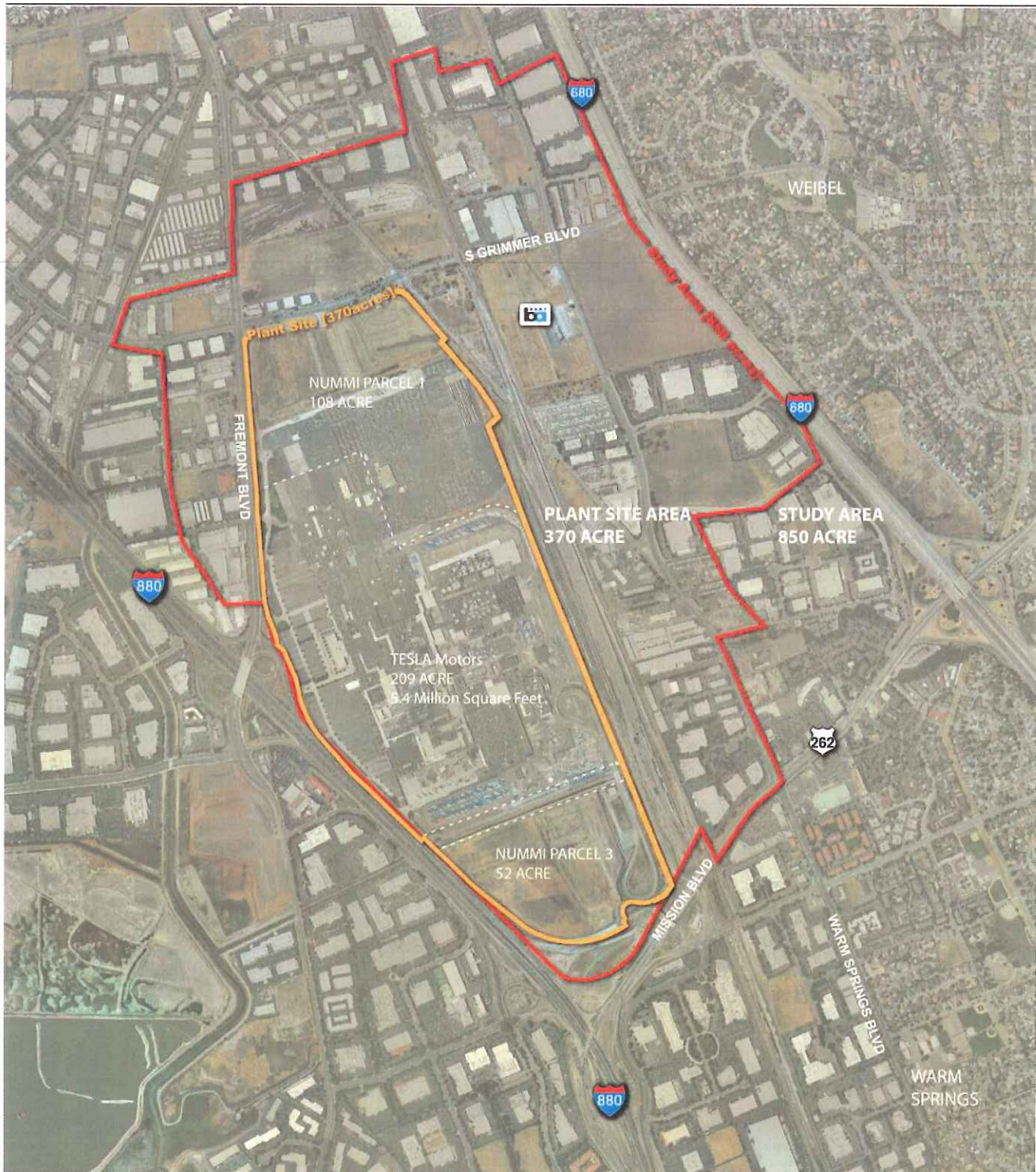
Area and Site Maps



Economic & Planning Systems, Inc.



Figure A-1: Site Aerial



Source: Google maps

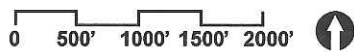


Figure A-2: Opportunities and Constraints - Industrial



Figure A-3: Opportunities and Constraints - Mixed Uses

